NIST Center for Neutron Research (NCNR)

Live Report

22-Feb-2004 8:14:58 AM

There are a total of **37** responses for the selected group from 15-Feb-2004 to 20-Feb-2004.

1. Your position

Percent	Count	Answers
0.0%	0/37	Graduate Student
0.0%	0/37	Post-doc
0.0%	0/37	Professor
100.0%	37/37	Staff Scientist
0.0%	0/37	Other
100.0%	**37/37**	**Summary**

2. Your primary instrument (Please use this instrument as the basis for answers to sections 3 and 4)

Percent	Count	Answers
10.8%	4/37	30m SANS, NG3
10.8%	4/37	30m SANS, NG7
2.7%	1/37	8m SANS, NG1
10.8%	4/37	Reflectometer, horizontal sample geometry, NG7
2.7%	1/37	Reflectometer, polarized beam option, vertical geometry, NG1
13.5%	5/37	Disk Chopper Spectrometer, NG4
2.7%	1/37	Backscattering Spectrometer, NG2
2.7%	1/37	Spin-Echo Spectrometer, NG5
16.2%	6/37	Cold Neutron Triple-Axis (SPINS), NG5
2.7%	1/37	USANS, BT5
10.8%	4/37	Powder Diffractometer, BT1

0.0%	0/37	Residual Stress Diffractometer, BT8
0.0%	0/37	Filter Analyzer Spectrometer (FANS), BT4
10.8%	4/37	Triple-Axis Spectrometer with polarized beam option, BT2
2.7%	1/37	Triple-Axis Spectrometer, BT9
100.0%	**37/37**	**Summary**

3. Please rate the proposal process

1) Ease of proposal submission	2.7/3
2) Referee reports and PAC comments	2.5/3
3) Proposal process fairness	2.5/3
4) Scheduling process following approval	2.8/3

Legends:
Poor
Adequate
Excellent
Overall rating based on the scale from 1 to 3

1) Ease of proposal submission

Percent	Count	Answers
0.0%	0/36	Poor
30.6%	11/36	Adequate
69.4%	25/36	Excellent
100.0%	**36/36**	**Summary**
	2.7/3	Overall rating from 1 to 3

2) Referee reports and PAC comments

Percent	Count	Answers
0.0%	0/35	Poor
51.4%	18/35	Adequate
48.6%	17/35	Excellent
100.0%	**35/35**	**Summary**
	2.5/3	Overall rating from 1 to 3

3) Proposal process fairness

Percent	Count	Answers
2.9%	1/35	Poor
42.9%	15/35	Adequate
54.3%	19/35	Excellent
100.0%	**35/35**	**Summary**
2.5/3		Overall rating from 1 to 3

4) Scheduling process following approval

Percent	Count	Answers
0.0%	0/36	Poor
16.7%	6/36	Adequate
83.3%	30/36	Excellent
100.0%	**36/36**	**Summary**
2.8/3		Overall rating from 1 to 3

4. Please rate the effectiveness of the health physics training

1) Relevance of computer based training content	2.5/3
2) Efficiency of computer based training	2.5/3
3) NCNR Health Physics tour	2.6/3
4) Discussion/exam review with health physicist	2.5/3
5) Refresher/Reindoctrination Training	2.5/3

Legends:
Poor
Adequate
Excellent
Overall rating based on the scale from 1 to 3

1) Relevance of computer based training content

Percent	Count	Answers
0.0%	0/36	Poor
52.8%	19/36	Adequate
47.2%	17/36	Excellent

100.0%	36/36 Summary
	2.5/3 Overall rating from 1 to 3

2) Efficiency of computer based training

Percent	Count	Answers
5.6%	2/36	Poor
41.7%	15/36	Adequate
52.8%	19/36	Excellent
100.0%	**36/36**	**Summary**
	2.5/3	Overall rating from 1 to 3

3) NCNR Health Physics tour

Percent	Count	Answers
0.0%	0/37	Poor
37.8%	14/37	Adequate
62.2%	23/37	Excellent
100.0%	**37/37**	**Summary**
	2.6/3	Overall rating from 1 to 3

4) Discussion/exam review with health physicist

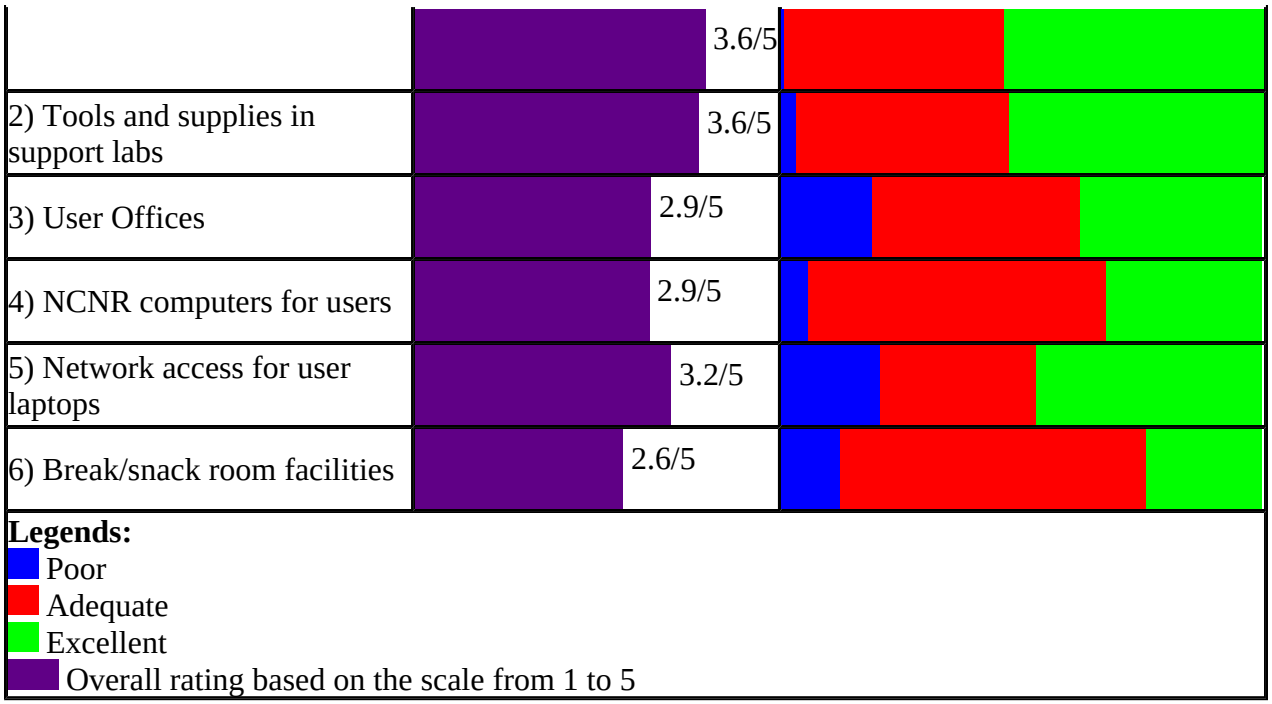
Percent	Count	Answers
0.0%	0/37	Poor
45.9%	17/37	Adequate
54.1%	20/37	Excellent
100.0%	**37/37**	**Summary**
	2.5/3	Overall rating from 1 to 3

5) Refresher/Reindoctrination Training

Percent	Count	Answers
0.0%	0/35	Poor
45.7%	16/35	Adequate
54.3%	19/35	Excellent
100.0%	**35/35**	**Summary**
	2.5/3	Overall rating from 1 to 3

5. Please rate the user support facilities

1) User Laboratory facilities		



1) User Laboratory facilities

Percent	Count	Answers
0.0%	0/37	Poor
45.9%	17/37	Adequate
54.1%	20/37	Excellent
100.0%	**37/37**	**Summary**
3.6/5		Overall rating from 1 to 5

2) Tools and supplies in support labs

Percent	Count	Answers
2.8%	1/36	Poor
44.4%	16/36	Adequate
52.8%	19/36	Excellent
100.0%	**36/36**	**Summary**
3.6/5		Overall rating from 1 to 5

3) User Offices

Percent	Count	Answers
18.9%	7/37	Poor
43.2%	16/37	Adequate
37.8%	14/37	Excellent
100.0%	**37/37**	**Summary**

2.9/5 Overall rating from 1 to 5

4) NCNR computers for users

Percent	Count	Answers
5.4%	2/37	Poor
62.2%	23/37	Adequate
32.4%	12/37	Excellent
100.0%	**37/37**	**Summary**

2.9/5 Overall rating from 1 to 5

5) Network access for user laptops

Percent	Count	Answers
20.6%	7/34	Poor
32.4%	11/34	Adequate
47.1%	16/34	Excellent
100.0%	**34/34**	**Summary**

3.2/5 Overall rating from 1 to 5

6) Break/snack room facilities

Percent	Count	Answers
12.1%	4/33	Poor
63.6%	21/33	Adequate
24.2%	8/33	Excellent
100.0%	**33/33**	**Summary**

2.6/5 Overall rating from 1 to 5

6. Please rate the following aspects of sample environments

1) Availability of different sample environments	3.8/5
2) Quality and reliability of the equipment	3.5/5
3) Support from sample environment personnel	4.7/5

Legends:
Poor
Adequate
Excellent
Overall rating based on the scale from 1 to 5

1) Availability of different sample environments

Percent	Count	Answers
0.0%	0/37	Poor
40.5%	15/37	Adequate
59.5%	22/37	Excellent
100.0%	**37/37**	**Summary**
3.8/5		Overall rating from 1 to 5

2) Quality and reliability of the equipment

Percent	Count	Answers
2.8%	1/36	Poor
47.2%	17/36	Adequate
50.0%	18/36	Excellent
100.0%	**36/36**	**Summary**
3.5/5		Overall rating from 1 to 5

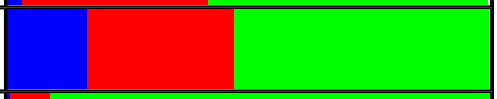
3) Support from sample environment personnel

Percent	Count	Answers
0.0%	0/35	Poor
11.4%	4/35	Adequate
88.6%	31/35	Excellent
100.0%	**35/35**	**Summary**
4.7/5		Overall rating from 1 to 5

7. What other sample environments would you research benefit from

- I like to make my own. As such I would appreciate more flexible and widely capable control interfaces between the NS instruments and user supplied ancillary equipment.
- The support staff is conscientious and hard working, but they are understaffed
- Higher field for both vertical and expecially horizontal cryomagnets.
- In-situ MBE chamber
- An accurate absolute calibration of the thermometry is essential.
- N/A
- horizontal magnet with wide access (not SANS-type)
- I'd like to see an IR spectrometer and/or Brewster angle microscope available to be used on the NG7 refl. beamline simultaneously with the reflectivity measurements on liquid surfaces

8. Please rate your primary NCNR instrument

1) Hardware reliability and performance	3.7/5	
2) Data acquisition software	3.4/5	
3) Support from NCNR staff	4.8/5	

Legends:
Poor
Adequate
Excellent
Overall rating based on the scale from 1 to 5

1) Hardware reliability and performance

Percent	Count	Answers
2.8%	1/36	Poor
38.9%	14/36	Adequate
58.3%	21/36	Excellent
100.0%	**36/36**	**Summary**
	3.7/5	Overall rating from 1 to 5

2) Data acquisition software

Percent	Count	Answers
16.7%	6/36	Poor
30.6%	11/36	Adequate
52.8%	19/36	Excellent
100.0%	**36/36**	**Summary**
	3.4/5	Overall rating from 1 to 5

3) Support from NCNR staff

Percent	Count	Answers
0.0%	0/36	Poor
8.3%	3/36	Adequate
91.7%	33/36	Excellent
100.0%	**36/36**	**Summary**
	4.8/5	Overall rating from 1 to 5

9. Please rate data analysis and visualization software at the NCNR

1) Quality of software	3.1/5	
2) Range of capabilities	2.8/5	
3) Assistance from NCNR staff	4.1/5	

Legends:
Poor
Adequate
Excellent
Overall rating based on the scale from 1 to 5

1) Quality of software

Percent	Count	Answers
14.3%	5/35	Poor
45.7%	16/35	Adequate
40.0%	14/35	Excellent
100.0%	**35/35**	**Summary**
	3.1/5	Overall rating from 1 to 5

2) Range of capabilities

Percent	Count	Answers
11.4%	4/35	Poor
57.1%	20/35	Adequate
31.4%	11/35	Excellent
100.0%	**35/35**	**Summary**
	2.8/5	Overall rating from 1 to 5

3) Assistance from NCNR staff

Percent	Count	Answers
0.0%	0/35	Poor
31.4%	11/35	Adequate
68.6%	24/35	Excellent
100.0%	**35/35**	**Summary**
	4.1/5	Overall rating from 1 to 5

10. What other data analysis tools would your research benefit from

- I prefer to use my own data analysis tools. In this regard, a unified data file format would be highly welcomed
- Data analysis software is just in the process of being upgraded and the new system looks like it is vastly improved
- Software designed for the occasional user rather than the expert user.
- See answer to 3.3
- The spectrometer control program is primitive and clumsy. It should be updated and commonalities pursued with other facilities.
- I use my own softwares to analyze and visualize data.
  Current software is sufficient and the choise entered in 3.5 does not mean that the NCNR need to do much more.
- Simulated scattering intensity for a number of simple model cross-sections (eg Bragg scatytering by powder and single crystals, a single-particle scattering for a given dispersion)
- Data fitting software

11. Please rate to what extent these forms of remote access (would) benefit your research program

1) Remote viewing of instrument status and data	2.2/3	
2) Remote control of instrument	1.8/3	
3) Mail in samples for simple, well defined measurements	1.8/3	

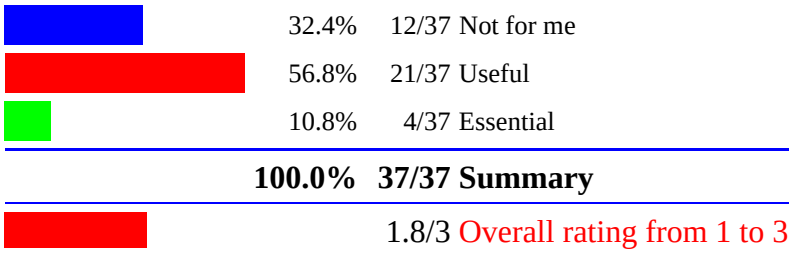
Legends:
Not for me
Useful
Essential
Overall rating based on the scale from 1 to 3

1) Remote viewing of instrument status and data

Percent	Count	Answers
10.8%	4/37	Not for me
62.2%	23/37	Useful
27.0%	10/37	Essential
100.0%	**37/37**	**Summary**
	2.2/3	Overall rating from 1 to 3

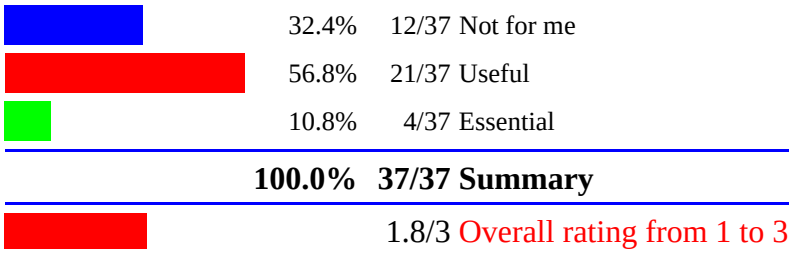
2) Remote control of instrument

Percent	Count	Answers



32.4%	12/37	Not for me
56.8%	21/37	Useful
10.8%	4/37	Essential
100.0%	**37/37**	**Summary**
	1.8/3	Overall rating from 1 to 3

3) Mail in samples for simple, well defined measurements



Percent	Count	Answers
32.4%	12/37	Not for me
56.8%	21/37	Useful
10.8%	4/37	Essential
100.0%	**37/37**	**Summary**
	1.8/3	Overall rating from 1 to 3

12. Please list any neutron instruments not currently at the NCNR that would benefit your research program or the community in general.

- Zero field spin echo triple axis
- A spin echo spectrometer that actually worked and had software that wasn't a disaster.
- BT7
- N/A
- An instrument covers the Q range from 0.01 to 2.0 A-1. It is an instrument between the currently existing SANS and wide-angle diffractometer. The instrument shall be very capable of Machine wiht suhc a range tackles the nano-scale, which will benefit the entire nano-community.

13. Are there any other comments or suggestions about the NCNR that you would like to add?

- The NCNR is one of the finest user facilities in the world. The instruments provide capabilities that are unique and critical to the field of materials research, biological sciences, chemistry, and solid state physics. The facility is maintained such that the instruments are easy to use, always operating reliably, and running around the clock. The funding is put to exceptionally good use. Plus, on a scale of 1-10, the staff is a 99! They are always available to help- before, during and after experiments, and they provide excellent training, teaching and customer service functions. This facility is a precious and indispensible resource for the advancement of science and should, unquestionably, be fully staffed and supported for many years to come.
- Can you clone Mike? I think US neutron scattering needs about five of him. And good luck to Pat.
- The NCNR has the best suite of instruments and sample environments among US neutron facilities. And it is also the most open and fair to the user community. I hope that both can

be continued to the future.

- Decreased funding to the NCNR will significantly impact U.S. materials science research capabilities in a negative way, and at a time when efforts abroad are actually being built up. The U.S. needs to maintain and enhance our existing cutting-edge materials research capabilities, not cripple them with funding cuts. The characterization and fundamental understanding of materials with exploitable properties remains the "bottom of the food chain" for the development of advanced technologies and for realizing the dreams of future applications.
- NCNR staff are excellent. The secretary, safety trainers, staff scientists (especially Dr. Sushil Satija and Dr. Min Lin) are knowledgable and always ready to help.
- Do something about those user cubicles!